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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/189,010	11/09/1998	TATSUYUKI TOKUNAGA	1232-4478	5014

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EXAMINER

YE, LIN

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 01/05/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

TS

**Office Action Summary**

Application No.

09/189,010

Applicant(s)

TOKUNAGA, TATSUYUKI

Examiner

Lin Ye

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) 4,5,15-17 and 23-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-14 and 18-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant has filed a copy of the certified English translation of applicant's priority art which claimed to Japanese Application JP. 9-313432, filed November 14, 1997. The examiner acknowledged and agrees the secondary reference Heller is not properly available as prior art to be applied against this application. For that reason, Applicant's arguments with respect to claims 1-3, 6-14 and 18-22 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6-14, 18-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwasaki U.S. Patent 5,497,215 in view of Hirt et al. U.S. Patent 5,883,830.

Referring to claim 1, the Iwasaki reference discloses in Figure 2, a photoelectric conversion device comprising: photoelectric conversion means (photometry part 10) including a plurality of photoelectric conversion elements (For example, photometry areas 10a and 10b) which is constructed by a plurality of pixels on a semiconductor substrate (See Col. 3, lines 15-24); and a plurality of storage means (first accumulation control part 16 and

second accumulation control part 17), each for storing predetermined control information for controlling corresponding photoelectric conversion element (See Col. 3, lines 40-48).

However, the Iwasaki reference does not explicitly states the plurality of storage means and photoelectric conversion means are formed on the same semiconductor substrate (single chip).

The Hirt reference discloses in Figure 1, an single integrated chip (10) formed from a CMOS process on a single chip having an image sensor array (12), a flash programmable memory (14), a CPU (controller unit 16) and a interface circuit (A/D) including in the controller unit (See Col 4, lines 11-30 and Col. 5, lines 35-46). The Hirt reference is an evidence that one of ordinary skill in the art at the time to see more advantages for integrating sensor, CPU and memory into a single chip, because it will significantly reduce the device size and making the device more portable. For that reason, it would have been obvious to see said the plurality of storage means and photoelectric conversion means are formed on the same semiconductor substrate disclosed by Iwasaki.

Referring to claim 2, the Iwasaki reference discloses control means for controlling charge accumulation of said photoelectric conversion means (10a and 10b) on the basis of control information stored in said storage means (16 and 17) (See Col. 3, lines 50-55).

Referring to claim 3, the Iwasaki reference discloses wherein said photoelectric conversion means further includes monitor (brightness calculator 12) means for monitoring an accumulated charge state in said photoelectric conversion element, and said control means includes selection means for selecting an arbitrary one of a plurality of pieces of status information (such as date and time and sets an initial accumulation time) on the basis of the

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control information stored in said storage means (16 and 17), and comparison means for comparing an output from said monitor means with the status information selected by said selection means, and controls the charge accumulation of said photoelectric conversion means on the basis of comparison result of said comparison means as shown in Figures 10-12.

Referring to claim 6, the Iwasaki reference discloses a plurality of photoelectric conversion means equivalent to said photoelectric conversion means (10a and 10b).

Referring to claim 7, the Iwasaki reference discloses wherein said monitor means monitors and outputs information based on a maximum accumulated charge amount of said photoelectric conversion element as shown in Figure 12 (See Col. 47-49).

Referring to claim 8, the Iwasaki reference discloses wherein said control means stores the status information selected by said selection means in said storage means as the control information as shown in Figure 11.

Referring to claim 9, the Iwasaki and Hirt references disclose all subject matter as discussed with respect to same comment as with claim 1.

Referring to claim 10, the Iwasaki reference discloses wherein said control means includes determination means for determining predetermined information on the basis of said output from said monitor means, and stores the information determined by said determination means in said storage means as the control information as shown in Figure 10.

Referring to claim 11, the Iwasaki and Hirt references disclose all subject matter as discussed with respect to same comment as with claim 10.

Referring to claim 12, the Iwasaki and Hirt references disclose all subject matter as discussed with respected to same comment as with claim 1.

Referring to claim 13, the Iwasaki and Hirt references disclose all subject matter as discussed with respected to same comment as with claim 3.

Referring to claim 14, the Iwasaki and Hirt references disclose all subject matter as discussed with respected to same comment as with claims 6 and 9.

Referring to claim 18, the Iwasaki and Hirt references disclose all subject matter as discussed with respected to same comment as with claim 7.

Referring to claim 19, the Iwasaki and Hirt references disclose all subject matter as discussed with respected to same comment as with claim 8.

Referring to claim 20, the Iwasaki and Hirt references disclose all subject matter as discussed with respected to same comment as with claim 10.

Referring to claim 22, the Iwasaki discloses the photometry system which computer-readably stores the processing steps of a control method as shown in Figure 10.

4. Claim 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Iwasaki U.S. Patent 5,497,215 in view of Hirt et al. U.S. Patent 5,883,830 and Akashi et al. U.S. Patent 5,615,399.

Referring to claim 21, the Iwasaki and Hirt references disclose all subject matter as discussed in respected claim 1, except the references do not explicitly states a focus detection device including the photoelectric conversion device.

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The Akashi reference disclose in Figure 1, the focus detecting apparatus including a photoelectric conversion device (area sensor 201). The Akashi reference is an evidence that one of ordinary skill in the art at the time to see more advantages for a focus detecting apparatus using an area sensor as an AF sensor, because the focus detecting device can be capable of accomplishing focus detection automatically and accurately. For that reason, it would have been obvious to see said the focus detection device including the photoelectric conversion device disclosed by Iwasaki.

### *Conclusion*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Lin Ye** whose telephone number is **(703) 305-3250**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on (703) 305-4929.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, DC. 20231

Or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive,  
Arlington, VA., Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Lin Ye  
December 23, 2003

  
VU LE  
PRIMARY EXAMINER